



NEW from  
Friden

# Friden 6010 Electronic Computer

a low-cost

■ / ALL TYPES OF BILLING —————→  
A BROAD RANGE OF ACCOUNTING APPLICATIONS / PAYROLL / STATISTICAL QUALITY CONTROL  
MANY OTHER BUSINESS APPLICATIONS WHICH REQUIRE HIGH-SPEED COMPUTATION —————→



The new Friden 6010 is a low-cost electronic computer designed especially for business applications which require high-speed computation as well as descriptive alphabetic information. ■ In spite of its low cost, the Friden 6010 Electronic Computer has many characteristics of more expensive computer systems: it is fully transistorized; it has random access core storage; it performs logical functions; and it is capable of unattended operation. ■ The electronic processor of the Friden 6010 operates faster than many larger computers. For example, *in one second it can make over 750 additions—over 45,000 in one minute*. Yet, the machine takes up no more floor space than a secretary's desk and can be operated or monitored by any reasonably alert typist after a short period of instruction. ■ You can plug the Friden 6010 Electronic Computer into any standard wall outlet. Air conditioning is not necessary. ■ Friden computer specialists have devised a simple linear programming method which requires only sequential wiring on a removable program panel. You may have a separate program panel for each application, or you may wire a single panel for several applications, depending on the complexity of the programs involved. ■ The Friden 6010 Electronic Computer is versatile. It accepts input from punched tape, edge-punched cards, tabulating cards, auxiliary input units, or the familiar electric typewriter keyboard of the Friden Flexowriter® (the basic input-output unit). It produces output in the form of a printed document and punched paper tape or edge-punched cards. When required, it also controls auxiliary output units, such as tape- or card-punch machines. ■ Here is true automation, available now, at a practical cost within the range of even small companies. Let your local Friden Systems man show you how the Friden 6010 Electronic Computer can bring the benefits of automation to your company. Call him soon.

## .....solid-state computer for business applications



Changing jobs on the Friden 6010 Electronic Computer is a simple matter. The operator removes one program panel and inserts another. It takes only a few seconds.



## INPUT-OUTPUT EQUIPMENT AVAILABLE WITH THE FRIDEN 6010 ELECTRONIC COMPUTER

The standard Friden 6010 Electronic Computer system includes the Friden 6010 Electronic Processor and the Friden 6011 Flexowriter (the basic input-output unit). The Flexowriter incorporates paper tape reader (tab card reader optional), paper tape

punch, typing unit, program keys, and facilities for connection of additional input-output units. These optional units, described below, operate on-line; that is, they are connected to and controlled by the computer. They provide extra versatility, as required.

### ***Friden 6012 Auxiliary Tape Reader***

This unit extends the processing capability of the system. It reads punched paper tape and transmits data to the computer in either synchronous or alternate operation with the reader on the 6011 Flexowriter. In synchronous operation, both readers are active simultaneously. In alternate operation, reading switches from one reader to the other on command of control codes in the tapes.

### ***Friden 6016 Tab Card Punch Control***

This unit enables the computer to control an IBM 024-026 Card Punch so that tab cards may be produced as an automatic by-product of the computer's operation.

### ***Friden 6018 Receiver Flexowriter®***

This unit permits automatic preparation of a related document at the same time the computer is preparing the original document. For example, it will prepare payroll checks while the computer prepares a payroll journal.

### ***Friden 6013 Auxiliary Tape/Edge-Punched Card Reader***

This unit reads tape or edge-punched cards and transmits data to the computer in alternate operation with the reader on the 6011 Flexowriter.

### ***Friden 6014 Selectadata® Reader***

Like the 6012 Auxiliary Tape Reader, this unit reads tape in synchronous operation with the reader on the 6011 Flexowriter. It has the additional capabilities of automatically searching tape for desired data and causing readout, transmitting semi-variable data to the computer, and extending the processing capability of the system.

### ***Friden 6019 Auxiliary Accounting Keyboard***

This 10-key unit permits buffer-stored numerical entries to the electronic processor, with automatic columnar justification, automatic placement of preceding zeros in output tape or cards, and independent listing-totaling.

### ***Friden 6015 Auxiliary Tape Punch***

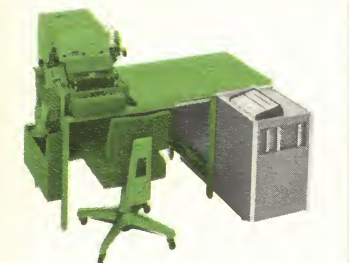
As the punch on the 6011 Flexowriter produces one tape, the 6015 Auxiliary Tape Punch produces a second tape with complete or selected data. Both tapes are created as an automatic by-product of the computer's operation.

### ***Off-Line Input Units***

Any machines which produce standard 8-channel punched tape, edge-punched cards, or 80-column tab cards can be used as off-line (unconnected) input units to the Friden 6010 Electronic Computer by supplying data for the computer to process. These include various models of the Friden Flexowriter®, Friden Computyper®, Friden Add-Punch®, Friden Teledata®, Friden Collectadata®, and machines of other manufacture, as well.







PROCESSOR



FLEXOWRITER



DESK

## Specifications

<b>INPUT</b>	Punched tape	<b>OUTPUT</b>	Printed document
	Edge-punched cards		Punched tape
	Tabulating cards		Edge-punched cards
	Flexowriter keyboard		Control of auxiliary output units
	Auxiliary input units		(tape-or card-punch machines)

### INTERNAL OPERATING SPEEDS

Addition:	1.3 milliseconds
Subtraction:	1.3 milliseconds
Multiplication:	50 milliseconds (average)
Division and square root:	program subroutine
Input-output:	10 characters per second

(All operating speeds include access time.)

### MEMORY

Variable storage:	240 decimal digits of core memory organized into 15 words of 16 digits each.
Fixed storage:	80 decimal digits of fixed data storage organized into 5 words of 16 digits each. (Fixed storage is wired on the removable program panel and may be varied from application to application.)

### DIMENSIONS

6010 Electronic Processor:	42" deep by 16" wide by 27" high
Flexowriter:	21 1/4" deep by 16 1/2" wide by 10" high
Flexowriter desk:	25" deep by 56" wide by 27" high

### WEIGHT

6010 Electronic Processor:	approximately 240 lbs.
Flexowriter:	approximately 85 lbs.
Flexowriter desk:	approximately 50 lbs.

### POWER REQUIREMENTS

105-115 volts, AC, 60 cycles ( $\pm 1/2$  cycle)  
2 amperes maximum

■ Your local Friden office can give you complete details on how the Friden 6010 Electronic Computer can fit into your operation. Why not call now? Or write to Friden, Inc., San Leandro, California.

# Friden, Inc.

HOME OFFICE AND MAIN PLANT  
SAN LEANDRO, CALIFORNIA  
SALES AND SERVICE THROUGHOUT THE WORLD

### FRIDEN, INC.

W. H. STILES, Branch Manager  
41 Saw Mill River Rd., P.O. Box 128  
Hawthorne, N.Y. 10532 • Phone ROgers 9-4900

**ANTHONY J. FLOWER**

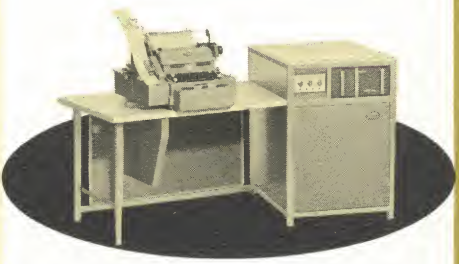
**Friden, Inc.**

41 SAW MILL RIVER ROAD  
HAWTHORNE, NEW YORK  
ROGERS 9-4900

---



automation  
work-center



MODEL CTP  
Friden  
Compuwriter®



The new Model CTP Friden Computyper is *more* than an automatic billing department at a single desk. With its new features, it is really an *automation work-center*, ready and able to take on any number of paperwork jobs. ■ Punched paper tape, edge-punched cards, or tabulating cards “talk” to the Computyper with speed and accuracy. Automatically they supply all basic information. Automatically they instruct the Computyper to write, compute, tabulate, place decimals, punch new tape or cards. ■ Thus, billing and other paperwork jobs become largely a matter of inserting punched tape or cards into the Computyper. The machine does the rest automatically—at the equivalent of 100 words a minute. Even variable data (data that changes from form to form) can be automatically supplied to the Computyper by Friden auxiliary input units, such as Selectadata®. Or, the operator simply enters the new data through the familiar electric typewriter keyboard. She doesn’t even have to tabulate or space—the Computyper does it automatically. ■ Some firms use the Computyper only for billing. Others use the machine for several applications. This is possible because the Computyper has a removable Program Panel. To change jobs, the operator merely changes program panels. This takes only seconds because the programming is already done for you by Friden. ■ The Computyper is available with single or double case keyboard, and with facilities for reading and punching 5- or 8-channel tape. Friden offers a variety of optional features and auxiliary equipment to meet even the most unusual requirements.

■ / *the new Friden Computyper®*  
*Model CTP*  
*is a complete billing department*  
*(and more!)*  
*at a single desk*

■ *some of the important jobs  
the Computyper® can handle*

The Computer handles your basic, everyday paperwork... paperwork like the samples shown below. It produces many of these documents with no operator intervention at all. On the sample invoice, the only keyboard entries are the order numbers, quantities, and discount percentages. All the rest of the writing and computing (shown in white) is done automatically. The machine can also figure more complicated invoices, such as those requiring quantity addition, cost-and-sell extensions, commission figuring, fractional dozens, and others.

SALE'S ORDER							
BILL OF LADING							
WORK ORDER							
SHIPPING ORDER							
PURCHASE ORDER							
VOUCHER CHECK							
PACKING REPORT							
PURCHASE COMMITMENT ANALYSIS							
INVENTORY							
SECURITY RECEIVABLE REGISTER							
STATEMENT							
INVOICE							
SOLD TO <u>SA. COMPANY</u> <u>100000, 100000, 100000</u>							
SHIP TO <u>SA.</u>							
INVOICE NO.	INVOICE DATE	CUST. NO.	CUST. ORDER NO.	SHIPPED VIA			
<u>24356</u>	<u>10/1/60</u>	<u>10000</u>	<u>24356</u>	<u>BY AIR MAIL</u>			
QUANTITY	PRICE	CODE	DESCRIPTION	EXTENSION	DISC.	NET AMOUNT	
100	1.00	5-11	10000	100.00	10.0%	90.00	
1500	1.00	5-11	10000	1500.00	5.0%	1425.00	
25	1.00	5-11	10000	25.00	10.0%	22.50	
10	1.00	5-11	10000	10.00		10.00	
TAX <u>100.00</u>					4.0%	4.00	
TOTAL <u>1725.00</u>						1725.00	

For the average business, one girl and one Computyer can be the entire billing department. What's more, the Computyer can do many other basic paperwork jobs. Ask your local Friden Systems man to show you how *your own* applications (like these examples) can be handled at this automation work-center.

**BILLING:** The Computer writes and computes invoices automatically. Then, reading its own by-product punched paper tape, it prepares an accounts receivable register or other statistical reports.

**INVENTORY:** While doing your billing, the Computyer automatically updates your inventory figures. This means there's no need for physical inventories or separate (and error-prone) machine operations.

**PURCHASE ORDERS:** First the CompuType writes your purchase orders. Afterwards it uses its own by-product tape to prepare voucher checks, receiving reports, purchase commitment analyses—all automatically.

**SALES ORDERS:** The Computyer prepares your sales orders. Then—controlled by its own by-product tape—it produces work orders, bills of lading, shipping memos... automatically, of course.

**STATEMENTS:** Tab cards produced as a by-product of billing enable the Computyer to produce statements automatically.

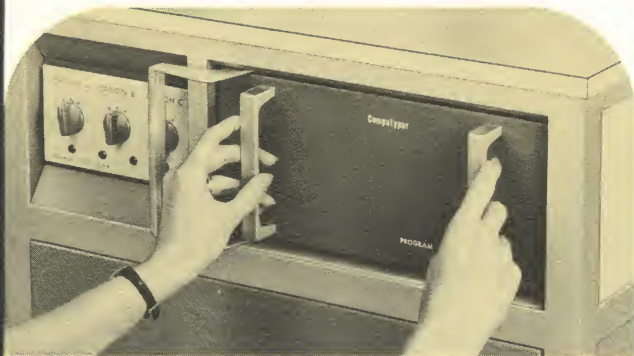
■ *what's your application?* \_\_\_\_\_

# Friden

# Model CTP CompuType<sup>®</sup>

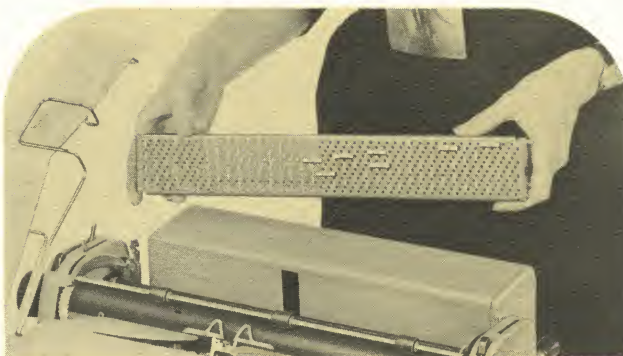
automation  
work-center





### ■ Removable Program Panel \_\_\_\_\_

If you want to change jobs on the Computyper—say from billing to purchase order writing—you merely change program panels. Friden technicians wire these panels for you beforehand. You are therefore assured of the most efficient machine programming for any job. The operator can remove one panel and insert another in seconds.



### ■ Removable Control Rack \_\_\_\_\_

Friden has combined tabulating mechanisms and actuators into a single Control Rack which can be quickly changed by the operator. As with the removable Program Panel, you can have a separate Control Rack for each job. They adapt the Computyper to any changes in forms design.

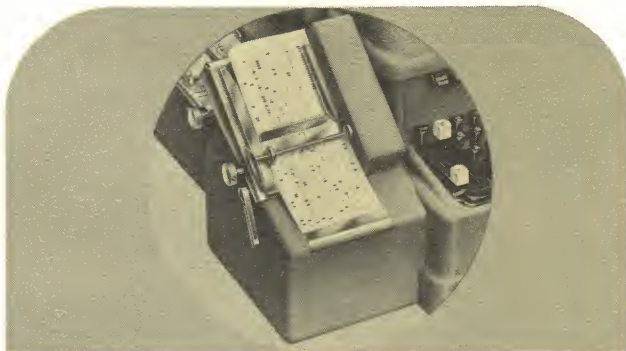
#### INPUT

Punched paper tape  
Edge-punched cards  
Tabulating cards  
Keyboard  
Auxiliary input units

#### OUTPUT

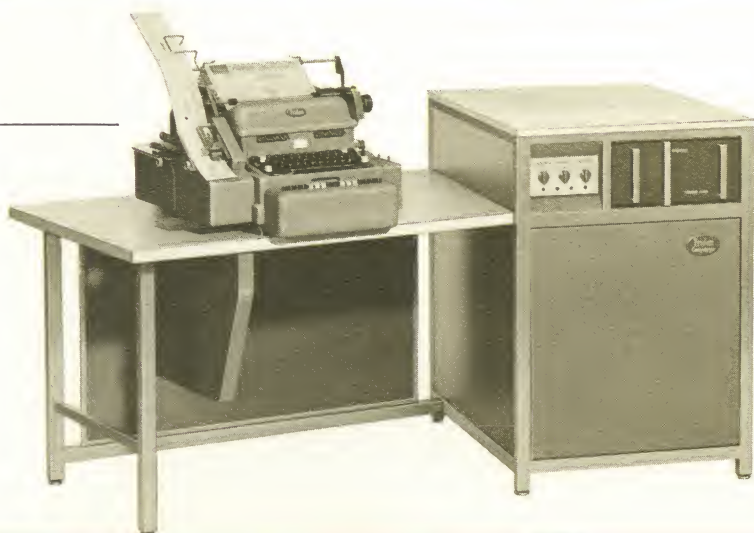
Document  
Punched paper tape  
Edge-punched cards  
Tabulating cards  
Auxiliary output units

■ *the Computyper® is versatile*



### ■ Tab Card Reader \_\_\_\_\_

If your application calls for tab card input, you can specify a Tab Card Reader for your Computyper. Auxiliary units, such as Friden Selectadata®, provide forms control and eliminate need for special codes in the cards. The Computyper can also cause *punching* of tab cards as an automatic by-product of preparing a document. This not only does away with manual key-punching and verifying, but also tape-to-card conversion.



MODEL CTP

# Friden Computyper.®



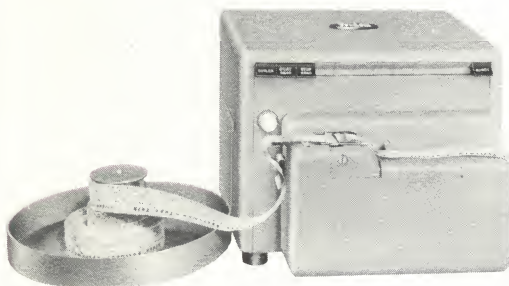


## ■ THE COMPUTYPER® IS ADAPTABLE

It's a simple matter to connect auxiliary input or output units to the Computyper—either at the time of installation, or later on when automation needs may change or increase. Some of these units are shown here. Through the use of a Friden control unit, you can even attach a card punch machine and get tab cards as an automatic by-product of performing other jobs on the Computyper. Thus, the Computyper not only provides automation for immediate needs, but its adaptability means that it can serve as an automation work-center for years to come. Get in touch with your local Friden office now for complete information.

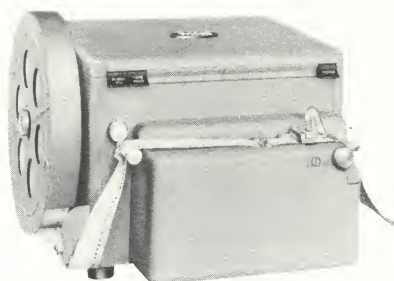
### AUXILIARY READER

Operating synchronously with the Computyper's own reader, the Friden Auxiliary Tape Reader permits introduction of selected data to the Computyper from a second source, under control of codes punched into a program tape.



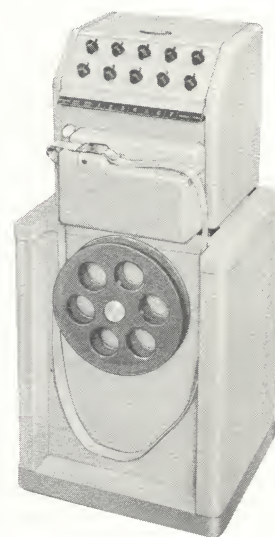
### AUXILIARY PUNCH

Besides the by-product tape which the Computyper itself produces, the Friden Auxiliary Tape Punch enables punching of a second tape as a by-product of document preparation. Each tape may contain selected information, as required.



### SELECTADATA®

This special auxiliary reader can recall data from storage and introduce it to the Computyper for automatic printing, or it may control the placement of printing on the forms by the Computyper.



# Friden, Inc.

SAN LEANDRO • CALIFORNIA

PLANTS IN:      SAN LEANDRO, CALIFORNIA  
ROCHESTER, NEW YORK • SCHILLER PARK, ILLINOIS  
LEWISTOWN, PENNSYLVANIA • NIJMEGEN, HOLLAND

SALES AND SERVICE THROUGHOUT THE WORLD

FORM 74-204

PRINTED IN U.S.A.

### FRIDEN, INC.

W. H. STILES, Branch Manager  
91 Montgomery Street • Scarsdale, New York  
Phone GReenleaf 2-4472